

Uterine Torsion at Term, An Unusual Cause of Abdominal Pain in Pregnancy

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Abstract

Torsion of the uterus is one of the rarest causes of abdominal pain during pregnancy. We present the case of a 33-year-old lady, Para 4, who presented with severe abdominal pain without vaginal bleeding (FIG. 1). Clinically, the provisional diagnosis was concealed Placental Abruption, and the plan was made to deliver her with category one Caesarean section. Intraoperatively, we realised the uterine torsion. A male baby was delivered through an incision in the posterior uterine wall and cried at birth. The uterus was returned to the anatomical position after re-suturing. The patient made an uneventful recovery, while her baby was admitted for observation in the Neonatal Unit for few hours and discharged to his mother on the same day. Both the mother and her baby were discharged home in good condition.

Keywords: *Uterine torsion; Abdominal pain; Detorsion of uterus*

1. Introduction

Uterine Torsion is a life-threatening condition strongly associated with perinatal morbidity and mortality [1]. Typically, the uterus tends to twist from the midline up to 30 degrees without causing any symptoms [2,3]. However, it is defined as the rotation of more than 45 degrees around the midline axis of the uterus (FIG. 2). In fact, torsion up to 180 degrees was reported. It can occur either clockwise or anti-clockwise [2]. The incidence of uterine torsion is unknown, whereas the perinatal mortality is approximately 12% [4].

2. Case Report

A 33-year-old lady, P 4 (with four previous C. Sections), had an uneventful pregnancy. She was transferred to hospital, at term, after experiencing very severe abdominal pain at home (FIG. 1). She denied any vaginal bleeding. She was hypotensive with a weak thready pulse and severe abdominal generalised tenderness. On clinical examination, the fetus was in cephalic presentation. A quick bedside Ultrasound scan confirmed a live fetus with a high placenta. The vaginal examination revealed a posterior, long and closed cervix. The patient was resuscitated and transferred immediately to the operation theatre for an

emergency caesarean section - as a case of Placental Abruption. During caesarean section, uterine torsion was detected (at 180 degrees) (FIG. 3). The posterior wall of the uterus became anterior. The urinary bladder twisted to the back of the uterus. Attempts to rotate the uterus to the anatomical position failed. An incision on the posterior uterine wall was carried out to deliver the baby. A live baby was delivered and cried at birth. We checked the previous uterine scar, which was intact. Uterus was closed after achieving haemostasis and rotated to the anatomical position. The patient recovered well post-delivery and was discharged home in good condition on the fourth day. The patient was seen six weeks after delivery in the clinic and fully debriefed. She declined bilateral tubal sterilisation and agreed to use long-term contraception.



FIG. 1. Severe Abdominal Pain is the cardinal manifestation of Uterine Torsion in Pregnancy.

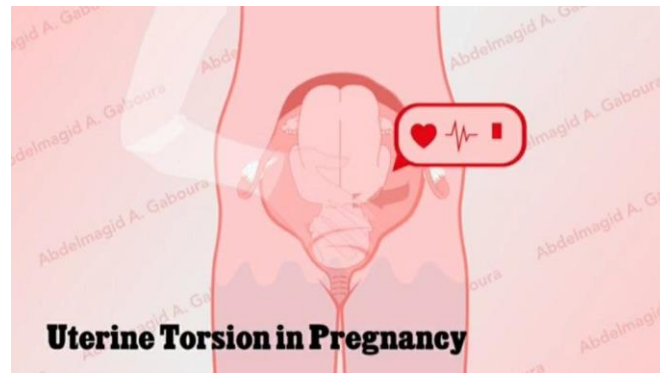
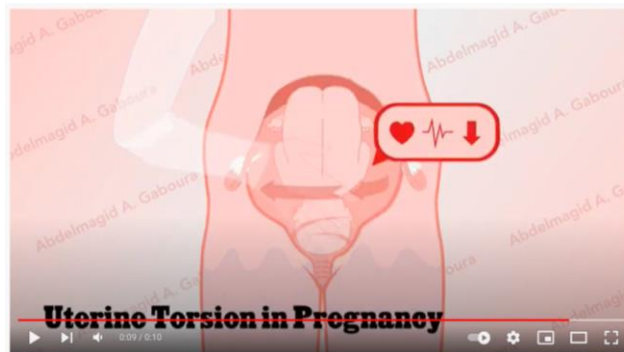


FIG. 2. Mild torsion of a gravid uterus more than 45 degrees with regular normal fetal heart rate.



FIG. 3. Complete uterine torsion of the gravid uterus of approximately 180 degrees with a great depression of fetal heart rate.



Animation Video. [Uterine torsion of around 180 degrees with a profound depression of fetal heart rate.](#)

3. Discussion

The aetiology of uterine torsion is unclear [4], and the incidence is unknown [5]. The risk factors of uterine torsion include abnormal fetal presentation and lie [6], pelvic masses such as ovarian cysts or fibroids [3,7], uterine malformation [3,8,9], irregular body movements. It is also possible that an inherent weakness between the cervix and uterine corpus may predispose to this condition. Strangely enough, one reported case occurred while the patient was asleep [8].

The diagnosis is usually made intraoperatively or retrospectively. It is almost impossible to diagnose the torsion of the uterus before surgery. Nevertheless, the differential diagnosis of uterine torsion includes placental abruption - whether concealed or revealed Placental Abruption [8], uterine rupture [7], ovarian accidents with pregnancy like ovarian torsion, rupture or haemorrhage [2], and other surgical issues such as acute appendicitis [1]. Uterine Torsion has been reported in all age categories of reproductive life [6], all parities [6] and all trimesters [4,6]. The symptoms and signs of uterine torsion include: Abdominal pain [1], vaginal bleeding [6], urinary or GIT complaints [6], maternal collapse [3,6], reduced fetal movement [2], obstructed labour [6], and fetal distress in labour or even fetal loss [2,8]. However, the patient may present herself with vague symptoms [1,3] or completely asymptomatic [6].

Management includes resuscitation [10], simultaneously or immediately followed by category I Caesarean section. It is mandatory to rotate the uterus to the anatomical position to maintain the blood supply to the uterus [10]. Conversion to midline laparotomy to rotate the uterus may give room for the detorsion of the uterus [1,10]. In most reported cases, the posterior uterine wall incision was the incision of choice specially if detorsion is impossible [4,10]. Some reported cases were managed with just rotating the uterus to the anatomical position and pregnancy continued to term, primarily if the uterine torsion occurs in early pregnancy [1,6].

4. Conclusion

Although it is a sporadic event in pregnancy, the anticipation of the torsion of the uterus is crucial as it is a life-threatening event. It is a rare differential diagnosis of Placental Abruption, Uterine Rupture, Ovarian accidents or Acute Appendicitis during pregnancy. The quicker the surgical intervention, the better the outcome.

5. Conflict of Interest

Nothing disclosed

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